

Patent claims

1. A component (1), comprising a shell-shaped basic member (2) and at least one core element (6), the basic member (2) having at least one closing seam (8) and being connected to the core element (6) by means of at least one tolerance-compensating intermediate layer (4).
2. The component as claimed in claim 1, characterized in that the basic member (2) is formed in a one-part or multi-part manner.
3. The component as claimed in claim 1 or 2, characterized in that the closing seam (8) has at least one joining location (10).
4. The component as claimed in one of claims 1 to 3, characterized in that the basic member (2) is closed by means of the closing seam (8) by a joining method, in particular welding, soldering, adhesive bonding, double-bend joining and/or riveting.
5. The component as claimed in one of claims 1 to 4, characterized in that the closing seam (8) has during the welding, soldering, double-bend joining or adhesive bonding and/or after the joining, a thickness (8a) corresponding to the thickness of the closed basic member (2).
6. The component as claimed in one of claims 1 to 5, characterized in that the thickness (8a) of the closing seam (8) after the joining is at most ten times the thickness of the closed basic member (2).
7. The component as claimed in one of claims 1 to 6, characterized in that the basic member (2) has

clearances, in particular is formed in such a way that it is partially perforated.

- 5 8. The component as claimed in claim 7, characterized in that integrations are provided, in particular at the joining locations (10).
- 10 9. The component as claimed in one of claims 1 to 8, characterized in that the core element (6) is a plastic element.
- 15 10. The component as claimed in one of claims 1 to 9, characterized in that the tolerance-compensating intermediate layer (4) comprises an adhesive and/or sealant, a double-sided adhesive tape and/or sealing or foam strips.
- 20 11. The component as claimed in one of claims 1 to 10, characterized in that electrical lines, interconnects, fiber-optic cables, sensors, strain gages and/or electronic chips are additionally provided as elements (12).
- 25 12. A method for producing a component (1) as claimed in one of claims 1 to 11, in which a tolerance-compensating intermediate layer (4) is introduced onto the inner side of the cross-sectionally open basic member (2) and at least one core element (6) is applied to the intermediate layer (4) and the
- 30 basic member (2) is closed and permanently connected along one or more closing seams (8) by means of a suitable joining technique.
- 35 13. The method as claimed in claim 12, characterized in that elements (12) such as electrical lines, interconnects, fibre-optic cables, sensors, strain gages and/or electronic chips are additionally introduced.

14. The use of a component (1) as claimed in one of claims 1 to 12 in vehicles or aircraft.